

DEFENSE LOGISTICS AGENCY



DIMINISHING MANUFACTURING SOURCES INTEGRATED PROGRAM TEAM

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WHAT IS DIMINISHING MANUFACTURING SOURCES?



- ◆ DoD Definition: The loss or impending loss of the **last known** manufacturer or supplier of raw material, production parts or repair parts
- ◆ Industry **Obsolescence** Definition: The loss or impending loss of the **original** manufacturer or supplier of raw material, production parts or repair parts

DLA - WHAT IS OUR ROLE?



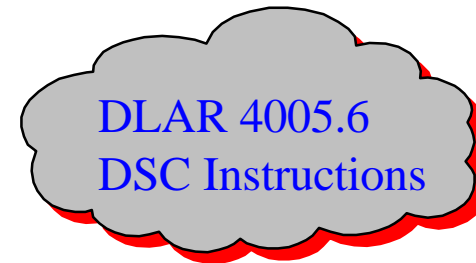
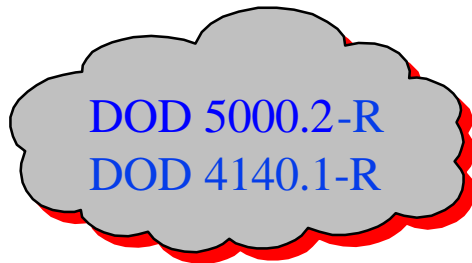
- ◆ Weapon Systems (W/S) Supported - 1,419
- ◆ Items Managed - 3.8M
 - ✓ (2.2M W/S Coded)
- ◆ Annual Procurements - \$3.0B
- ◆ Annual Sales - 11.1B

DLA's Mission
is
A Combat Support Agency

DLA DMSMS PROGRAM



- ◆ Decentralized Management
 - ✓ Multifunctional support
 - ✓ Each DSC bases program on their environment
- ◆ Use IPTs for major cases
- ◆ Bottom line - meet customer needs as cost effectively as possible



DLA DMSMS WORKING GROUP

PRIMARY POINTS OF CONTACT



ORGANIZATION	NAME	PHONE
DLA-MMPON	Mr. Phil Clark	(703)767-1424
DLA-MMLSP	Ms. Delbert Roberts	(703)767-1610
DCMCDE-N	Mr. Nate Green	(215)737-3454
DSCC-PAP	Mr. Dave McCrary	614)692-1082
DSCC-CD *	Mr. Jim Nesseler	614)692-7569
DISC-PMI	Mr. Bill O'Neill	(215)697-9373
DPSC-PM	Ms. Nancy Chester	(215)737-4218
DSCR-JJB	Mr. James Lee	(804)279-3152
DLSC-RPD	Mr. Ed Floyd	(616)961-4326

* Electronics Commodities

SOLUTION ALTERNATIVES



- ◆ Alternate Source (Including After Market)
- ◆ Alternate Item (Including Commercial)
- ◆ Re-engineering
- ◆ Prime Vendor
- ◆ Bridge Buy
- ◆ Lifetime Buy
- ◆ No Action



RECENT EXAMPLES







- ◆ Motorola (584 weapon systems - 17,000 NSNs)
- ◆ Texas Instruments (HARM Missile) \$16.5M
- ◆ Brackets for TF-30 Engine
- ◆ Bolts for TF-33 Engine
- ◆ Brake valves for C-131
- ◆ Cabling, bracket, struts, for A-10

COMMUNICATIONS



- ☎ Too many independent information systems, some automated, some in file drawers
- ☎ Communication between and within the Services weak, but getting better
 - ✓ Some do not get notified, some do
 - ✓ Different groups “solving” the same problem
 - ✓ More groups (IPTs/PATs) being formed
- ☎ We can't afford to do things this way in today's environment

DMSMS DATA BASE

-  Single point for DMSMS notifications
 - ✓ Eliminate duplication of effort
 - ✓ Save time and \$\$
-  Allow Government/Industry to share solution information`
-  Improved program oversight
-  Improved readiness

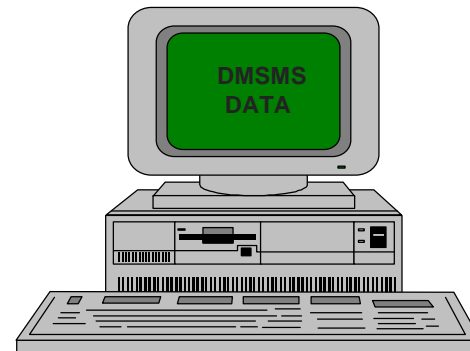


We need your help! This may be a great tool but it will be useless without user participation!

THE FUTURE - POSSIBILITIES



- ◆ Prediction Services/Tools
- ◆ Type Designator Data Bases
- ◆ Inventory information
- ◆ Take Advantage of The Internet
- ◆ IPT Results



DOD IPT DMS



- ◆ Identify IC obsolescence trends
- ◆ Determine if DMS is an industry wide or strictly DoD problem and why DoD has difficulty obtaining ICs
 - Related to a particular class of ICs?
 - Caused by technology advancement?
 - Suppliers going out of business?
- ◆ Evaluate adequacy of DoD IC DMS management
- ◆ Recommend a course of action:
 - Address the IC DMS problem
 - Establish management mechanisms to address future supply problems

IPT MEMBERSHIP



Co-Chairmen:

Mr. Lucien Chaker and Mr. Martin Meth
ODUSD(L) ODUSD(IA&I)

Army

Mr. Kenneth H. Brockel

Mr. Bob Gibbs

Navy

CAPT Lou Morris

Air Force

Dr. John Hines

Mr. Ron Shimazu

DARPA

Mr. Randy Harr

DLA

Mr. Phil Clark

Mr. Dave Taylor

OSD

Mr. .Peter Holbrok

Dr. Susan Turnbach

Joint Staff

CDR. Laurie Mckee

DMS IS NOT A NEW PROBLEM



- ◆ Services established electronics DMS support centers
- ◆ DoD formulated DMS policy in place
- ◆ OSD/DLA sponsored technical solution efforts
 - ✓ Microcircuit emulation (GEM)
 - ✓ RAMP
- ◆ Government/Industry Data Exchange Program (GIDEP)
DMS notification system begun

DOD Has Been Addressing Since Mid 1980s.

WHO'S STUDYING THE PROBLEM?



- ◆ Sustainment Readiness Working Group
 - Joint Directors of Labs Manufacturing Technology Panel
- ◆ Joint EIA Manufacturing/Materials Procurement
- ◆ EIA/NCAT Division White Paper
- ◆ Parts Acquisition Reform Team - Parts Mgmt Best Practices
- ◆ OSD Diminishing Manufacturing Sources and Material Shortages (DMSMS) Working Group Subgroup
- ◆ Joint Aeronautical Commanders Group - Affordability Decision Support Subgroup

DOD MANAGEMENT IPT CONSENSUS



- ◆ Many individual Service activities address DMS; problems & solutions not shared
 - Intelligent, coordinated management would reduce impact
- ◆ Wartime surge and contingencies not addressed
- ◆ No program element (PE) for DMS solutions
- ◆ Acquisition initiatives may exacerbate DMS

No Single Solution For All DMS Situations

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AMEND SUPPLY POLICY (FIELDDED SYSTEMS)



Problem Statement: When notice is given by the item manager that an IC will no longer be produced, not all users, e.g., program managers, respond with their outyear demand projections

Recommendations:

- ◆ Direct Services to improve procedures for providing demand projections once DMS notifications are received
Action: USD(A&T)/SAE's
- ◆ Direct ICP's to limit automatic issue of DMS parts to those who provided outyear projections
 - Item manager will evaluate the impact of issuing the part to non-responders
 - Increase charges to expand parts availability to non responders

Action: DUSD (Logistics)

ESTABLISH SUPPLY SOURCE DATA WAREHOUSE (NEW AND FIELDDED SYSTEMS)



Problem statement:

- ◆ Information on IC weapon systems applications and available IC substitution candidates is difficult to find.
- ◆ Available engineering support capability not consistently being used.

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GOVERNMENT DMS MANAGEMENT CAPABILITY

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Organization	W/S Config	System Analysis	Predict/ Analysis	I/D IC Sources	DMS Alerts
NSWC - DTC	X	X	X	X	X
MICOM	X	X	X	X	
WPAFB (ECOM)	X	X	X	X	
NUSWC	X	X	X		
DEMA		X	X		
NAWC - DTC	X	X	X		
DSCC	X		X	X	X
GIDEP				X	X
DLSC	X			X	

Full Service DMS Engineering Centers

GOVERNMENT DMS MANAGEMENT CAPABILITY

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Organization	IC Subt. Selection	IC Design	IC Mfg	IC Testing	PWB Dsg/Mfg
NSWC - DTC	X	X		X	X
MICOM	X				
WPAFB	X				
NUSWC	X				
DEMA		X	X ¹	X	X
NAWC - DTC	X	X			X
DSCC	X			X	
Sarnoff - GEM		X	X	X	

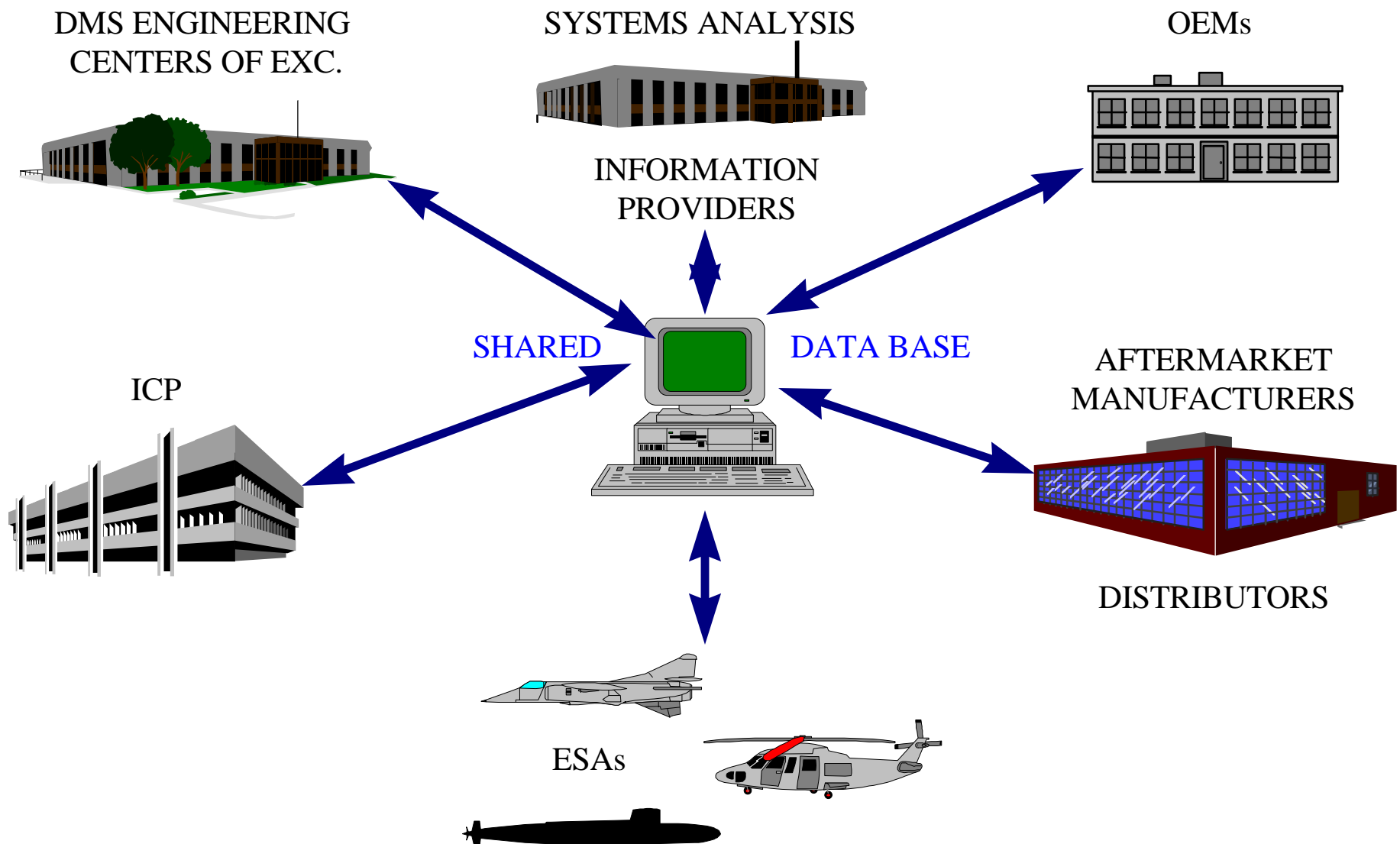
¹ Prototype Manufacturing

COMMERCIAL DMS MANAGEMENT CAPABILITY

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Organization	DMS Alerts	System Analysis	Predict/ Analysis	I/D IC Sources	IC Mfg
TACTech	X	X	X	X	
Uwohali	X	X	X	X	
ASPECT				X	
IHS				X	
IC OEMs				X	X
Aftermarket				X	X

SUPPLY PARTS DATA WAREHOUSE



ESTABLISH SUPPLY SOURCE DATA DRAFT WAREHOUSE



Recommendations:

- ◆ Determine the appropriate organization to maintain an IC data warehouse and to establish the link with DMS engineering centers

Action: DUSD(L)

- ◆ Advertise IC DMS engineering center capabilities.

Action: DUSD(L)

- ◆ Designate an Electronic Commerce Resource Center (ECRC) to work with the selected organization on networking and data base capability for querying weapon systems configurations

Action: DLA

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IMPOSE DATA REQUIREMENTS (NEW SYSTEMS)



Problem statement: Many systems do not possess nor have access to data required to substitute or to reengineer an IC when production of that part is terminated

Recommendations:

- ◆ To facilitate part substitution actions, acquisition contracts should contain a clause that allows data access under defined criteria. Criteria includes: vendor notification that IC manufacture will be discontinued; OEM will no longer be responsible for logistics, etc.
- ◆ Data should be in a functional level form, technology independent, and using standard product description (suggest IEEE VHDL)
- ◆ Require reviews by SAEs during acquisition process

Actions: USD(A&T)

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INSTALL EXECUTIVE AGENT (NEW AND FIELDDED SYSTEMS)



Problem statement: There is no central activity to coordinate DMS activities. Some economies of scale and elimination of possible duplicate activities would result with better coordination.

Recommendations:

- ◆ Designate USD(A&T) office as DMS Executive Agent.
- ◆ Empower Executive Agent to:
 - Monitor technology trends; proactively remedy DMS problems
 - Coordinate DoD IC DMS activities and facilitate communications
 - Recommend changes to acquisition and material management policies and procedures
- ◆ Provide funding to support Executive Agent activities.
- ◆ **Actions:** USD(A&T)

SUMMARY



- ◆ The DMS Program is working ... could be better
- ◆ Improved teamwork and communication are keys to success
- ◆ DMS microcircuit IPT results due soon